

What is claimed is:

1. A data reception method, data being transmitted to a receiving device via a signal having a constant frequency at least part of the time, the signal being read out by a first readout device and a second readout device with a time offset, the readout being offset in time by at least one switching period of the readout devices, wherein the output signals of the readout devices are checked for validity of the signals and a valid signal is selected.

2. The method according to Claim 1, wherein the signal is read out by the first readout device in a first clock pulse at the frequency, and the signal is read out by the second readout device in a second clock pulse at the frequency.

3. The method according to Claim 2, wherein the phase of the first clock pulse is shifted by half a period with respect to the phase of the second clock pulse.

4. The method according to one of Claims 2-3, wherein the first clock pulse and the second clock pulse are defined by a square signal and the second clock pulse is obtained by inversion of the first clock pulse.

5. The method according to one of the preceding claims, wherein the data is read out by the first readout device with a first clock edge and the data is read out by the second readout device with a second clock edge.

6. The method according to one of the preceding claims, wherein a switching device is controlled using a checking device, and one of the output signals of the first or the second readout device is selected by the switching device.

7. The method according to one of the preceding claims,

wherein the information regarding the signal selected is stored, preferably in the checking device.

8. The method according to one of the preceding claims, wherein the signals are transmitted in an encoded form.

9. The method according to Claim 8, wherein the validity of the signals is determined by checking the validity of the code.

10. The method according to one of the preceding claims, wherein key words are transmitted to determine the validity of the signals and/or the code.

11. The method according to Claim 10, wherein the key words are each sent after a predefinable time period.

12. The method according to one of the preceding claims, wherein a check value is determined from the data received and a validity of the signals is determined by comparison of the check value with a stored value.

13. The method according to one of the preceding claims, wherein when the validity of the data is not determined, an error signal is output by the checking device.

14. The method according to one of the preceding claims, wherein a first and/or a second clock pulse is determined from the data signal.

15. The method according to one of the preceding claims, wherein data via which the validity of signals is determined is transmitted to the checking device.

16. Use of the method according to one of the preceding claims for receiving data in a data bus system.

17. A device for carrying out the method according to one of Claims 1-15.

18. The device according to Claim 17, wherein the first readout device is a first shift register (22), and the second readout device is a second shift register (24).

19. The device according to one of Claims 17-18, wherein a code can be supplied to the checking device (33) to check the validity of the output signals (45, 46) of the readout devices (22, 24).

20. An electrical apparatus which can be connected to a data bus (11) having a device according to one of Claims 17-19.